

REMARKS

The present application was filed on July 11, 2003 with claims 1-21. In the previous Office Action response, claims 1-21 were canceled without prejudice and replaced by new claims 22-41.

Claims 22-41 currently stand rejected under 35 U.S.C. §102(b) as being anticipated by Sears et al., "Split Menus: Effectively Using Selection Frequency to Organize Menus," ACM Transactions on Computer-Human Interaction, Vol. 1, No. 1, March 1994, pages 27-51 (hereinafter "Sears").

Regarding the §102(b) rejection of claims 22-41, Applicant initially notes that MPEP §2131 specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Independent claim 22 is directed to a processor-implemented method of rearranging a plurality of menu items within a menu structure of a user interface wherein user approval of menu alteration is obtained prior to replacing the current menu structure with the new menu structure calculated based on collected data about the respective selection rates of menu items within the current menu structure. Illustrative embodiments are described in the specification with reference to FIG. 2 at, for example, page 7, lines 32-34 ("[T]he reorganisation 20 of the menu structure is performed only when the user activates 21 said reorganisation, by using for example a special MMI comment."); at page 8, lines 30-34 ("A procedure 20 for the real reorganisation of the menu structure or the menu item however, is practically performed merely in response to a wilful activation 10b of the user, for example by use of a special MMI comment, to not result in a confusion."); and at page 10, lines 14-16, as amended (A "calculated menu structure may be proposed to the user for implementation prior to implementing the new menu structure. . . . [T]he user practically may confirm the implementation or not.") See generally the specification at page 7, line 21, to page 8, line 3; page 8, lines 29-34; and page 10, lines 10-20.

In formulating the rejection in the present Office Action at page 3, last paragraph, the Examiner argues, relying on Sears at "Page 32, Figure 1; Page 38, Paragraph 3; Page 39, Figures

II-IV,” that “there must be a menu selection which triggers the reordering of the menus. As user approval may be defined as a user selection of a menu item, as in Claim 26, this final selection before the reordering may be construed as the user approval. Note that this selection takes place before the completion of the replacing step, the collecting step (as the data for the initiating click has not yet been recorded) or the calculating step.”

Applicant initially notes that the Examiner appears to be arguing that Sears inherently discloses the limitations of claim 22. Applicant contends that this reliance on inherency is inappropriate and contrary to the relevant legal standards. See, e.g., In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (“To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’”) (citations omitted); Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.”) (emphasis in original).

Moreover, this limitation is simply not found in Sears. Rather, the relied-upon portions of Sears discuss a controlled experiment wherein subjects were presented with nine menu organizations, determined *a priori* by researchers based on previously-collected data. Once these menu organizations were determined, the controlled experiment did not involve any reordering of the menus, much less a menu selection which triggers the reordering of the menus. See Sears at pages 38-40.

The Examiner correctly notes that data was collected about the frequency of menu selection in order to determine the menu organizations. However, as discussed in Sears at, for example, pages 35-36, this data was collected in an earlier *in situ* usability study where researchers, rather than users, determined when to reorganize menus. As noted in Sears at, for example, page 38, first paragraph, researchers and users constitute distinct populations.

Notwithstanding the above traversal, however, Applicant has amended independent claim 22 to clarify that user approval of menu alteration is obtained via the user interface. Sears teaches away by instead disclosing a technique wherein “a program that created split menus . . .

was installed” and after “the split menus were used . . . the software was removed” (Sears, page 35, last paragraph). The disclosed technique, wherein approval of menu alteration comprises the installation of a separate program, clearly fails to reach the limitation wherein user approval of menu alteration is obtained via the user interface.

Furthermore, in formulating this rejection, the Examiner argues that because “user approval may be defined as a user selection of a menu item, as in Claim 26, this final selection before the reordering may be construed as the user approval.” While user approval may be broadly defined in the present specification, it is not proper for the Examiner to impute a definition to this element which is contrary to its plain meaning; rather, the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. See, e.g., Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004) (Ordinary, simple English words whose meaning is clear and unquestionable, absent any indication that their use in a particular context changes their meaning, are construed to mean exactly what they say.).

The previous claim 26 recited an additional limitation wherein user approval of a new menu structure may comprise user selection of a menu item. It does not define user approval as merely the user selection of a menu item, regardless of whether such a selection constitutes user approval of the new menu structure, as the Examiner apparently contends. Notwithstanding the above traversal, however, Applicant has amended claim 26 so as to clarify that user approval comprises the selection of a specified menu item, rather than an arbitrary menu item, as Examiner apparently contends. See, for example, the illustrative embodiments described in the present specification with reference to FIG. 2 at, for example, page 7, lines 32-34 (“[T]he reorganisation 20 of the menu structure is performed only when the user activates 21 said reorganisation, by using for example a special MMI comment.”) and page 8, lines 30-34 (“A procedure 20 for the real re-organisation of the menu structure or the menu item however, is practically performed merely in response to a wilful activation 10b of the user, for example by use of a special MMI comment, to not result in a confusion.”).

Accordingly, Applicant respectfully submits that Sears fails to teach at least the limitation of independent claim 22 wherein user approval of menu alteration is obtained prior to replacing the current menu structure with the new menu structure.

Independent claims 34 and 38 include limitations similar to those of independent claim 22, and have been amended in a manner similar to claim 22. Claims 34 and 38 are therefore believed allowable for reasons similar to those described above with reference to claim 22.

Dependent claims 23-33, 35-37 and 39-41 are believed allowable for at least the reasons identified above with regard to claim 1. Additionally, certain of these dependent claims are believed to define separately-patentable subject matter.

For example, dependent claims 25, 37 and 41, as amended, each contain limitations directed to displaying the new menu structure to the user prior to completion of the replacing step wherein the user approval comprises user approval of the new menu structure as displayed. In an illustrative embodiment described in the specification with reference to FIG. 2 at, for example, page 10, lines 14-16, as amended, a “calculated menu structure may be proposed to the user for implementation prior to implementing the new menu structure. . . . [T]he user practically may confirm the implementation or not.” In formulating these rejections in the present Office Action at page 5, first paragraph, the Examiner conclusorily asserts that “Sears discloses displaying the new menu structure to the user (i.e. Note that after the menu has been reordered, the new menu structure will be displayed to the user the next time the user accesses the menu.[]); and obtaining user approval of the new menu structure as displayed (i.e. As user approval may be defined as a user selection of a menu item, as in Claim 26, user approval will be attained at the point when the user selects a menu item from the new menu structure.).”

Here, apparently, the Examiner argues that the replacement of the current menu structure with a new menu structure, and the subsequent selection of an arbitrary menu item from the new structure, meets the limitations of amended claims 25, 37 and 41. Applicant respectfully submits that the selection of an arbitrary menu item from a new menu structure, which has replaced a current structure, simply fails to meet the limitations of amended claims 25, 37 and 41, wherein user approval of the new menu structure as displayed is obtained prior to the replacement of the current menu structure with the new menu structure. Moreover, as noted above with reference to the independent claims, a menu selection unrelated to user approval cannot be construed as meeting the recited limitation directed toward user approval.

Claim 27 contains limitations wherein the menu items are arranged within a plurality of functional groupings within the current menu structure and wherein the new menu structure comprises rearrangement of particular ones of the menu items within at least a given one of the

functional groupings while maintaining said plurality of functional groupings of the menu items. The Examiner argues, in the present Office Action at page 6, first paragraph, that the limitation wherein menu items are arranged within a plurality of functional groupings within the current menu structure is met by the split menus illustrated in, for example, Fig. 2 of Sears.

However, the Examiner, in analyzing the limitation wherein the new menu structure comprises rearrangement of particular ones of the menu items within at least a given one of the functional groupings while maintaining said plurality of functional groupings of the menu items, contends that “as shown in Figure 1, all menu items are arranged into one logical area, in which they are then rearranged. Note that his [sic] behavior will not eliminate the split menu (e.g., the functional groupings.)” The Examiner correctly concedes that Fig. 1 of Sears discloses a menu wherein “all menu items are arranged into one logical area, in which they are then rearranged,” which clearly fails to meet the limitation wherein the new menu structure comprises rearrangement of particular ones of the menu items within at least a given one of the functional groupings while maintaining said plurality of functional groupings of the menu items. Rather, the portion of Sears upon which the Examiner relies teaches away by instead disclosing a menu with a single local area within which all menu items are rearranged.

Nowhere does Sears teach a technique wherein a new menu structure comprises rearrangement of particular ones of the menu items within at least a given one of the functional groupings while maintaining said plurality of functional groupings of the menu items. Indeed, Sears further teaches away by teaching techniques for determining when items should be moved between functional groupings; see, for example, Section 6 of Sears on pages 47-48.

Claim 28, as amended, contains a limitation that the functional groupings comprise submenus which are displayed responsive to the selection of at least one menu item. In an illustrative embodiment described in the specification with reference to FIG. 1 at page 6, lines 14-25, the menu structure is hierarchically pre-organized in different layers or levels such that by selecting a menu item of an upper layer, further menu items can be selected out of a lower level. The split menus disclosed in Sears, on the other hand, display both the top section (comprising frequently selected items) and the bottom section (comprising infrequently selected items) of a menu at the same time. See, e.g., Sears at page 28, last full paragraph, and page 33, Fig. 2. Accordingly, Sears fails to meet the limitations of claim 28 as amended.

Claim 30 contains a limitation wherein the calculating step further comprises the step of calculating a difference between the new menu structure and the current menu structure and wherein the difference is a number of menu items in the new menu structure that have no corresponding match in the current menu structure. In formulating the rejection of claim 30 in the present Office Action at page 7, last paragraph, the Examiner argues:

A count is assigned each time a menu item is selected, including those not in the high frequency section. The threshold, as described above, would only be reached if the count of a menu item which was not in the high frequency section exceeded the count of a menu item which was in the high frequency section. If the menu structure is taken to be the high frequency section (because in this case, only the positions of menu items in the high frequency section is altered by selection frequency) then by counting one for every selection of a menu item not in the menu structure (i.e. not in the high frequency section) the threshold can be reached if the count of a menu item which is not in the menu structure exceeds the count of a menu item which is the menu structure (i.e. in the high frequency section.) (Page 32, Figure 1; Page 38, Paragraph 3; Page 39, Figures II-IV).

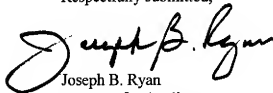
Applicant respectfully submits that, not only does the Examiner's argument find no support in the recited sections of Sears, which fail to disclose, for example, "only the positions of menu items in the high frequency section is altered by selection frequency," but it is based on an improper assumption that "the menu structure is taken to be the high frequency section." As is clear from the language of, for example, claims 22 and 27, a menu structure comprises menu items, which may be grouped within a plurality of functional groupings. Applicant respectfully submits that the "high frequency section" of Sears is more closely analogous to a functional grouping than a menu structure. Accordingly, the above-cited analysis, even if consistent with Sears, still fails to meet the limitations of claim 30.

Claim 32 contains a limitation wherein a threshold is predefined and claim 33 contains a limitation wherein a threshold is selected by a user. In formulating the rejections of these claims in the Office Action at page 8, last paragraph, and page 9, first paragraph, respectively, the Examiner relies on page 31, paragraph 2. Specifically, the Examiner claims that a text excerpt reading "We developed preliminary guidelines which help decide which items should be placed in the high frequency section of a split menu..." somehow "clearly indicates that the thresholds are predefined, and also that the thresholds were defined by a user."

Applicant respectfully submits that the preliminary guidelines upon which the Examiner predicates the instant rejections comprise (1) limiting the number of items in the high-frequency section to four or less in most situations unless it is necessary to place a few more items in the high-frequency section to preserve some meaningful organization or categorical relationship and (2) sorting all items by selection frequency and then, starting with the least frequently selected item, scanning until the increase in frequency between two successive items is greater than the mean of the frequencies. Applicant respectfully submits that these preliminary guidelines, given their flexible nature (e.g., permitting the placement of “a few more items” in a section to preserve “some meaningful” relationship) can hardly be considered predefined. Moreover, nowhere does the relied-upon section of Sears disclose that thresholds are selected by a user. Indeed, Sears itself discloses that the preliminary guidelines “were developed strictly for use in our [the researchers’] evaluation of split menus” rather than being selected by a user.

In view of the foregoing, Applicant believes that claims 22-41, which are currently pending in the application, are in condition for allowance, and respectfully requests withdrawal of the aforementioned rejections.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Joseph B. Ryan". The signature is fluid and cursive, with a large initial "J" and a stylized "B".

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